

Job Title: GIS and Remote Sensing Specialist

Job Responsibilities:

- Utilize GIS and remote sensing technologies to map, monitor, and analyze blue carbon ecosystems, including mangroves, seagrasses, and salt marshes.
- Process and analyze high-resolution satellite data and drone-based imagery for habitat classification, land cover change detection, and carbon quantification.
- Develop spatial models and conduct geostatistical analyses to support assessments of coastal and marine ecosystems' health, biodiversity, and carbon sequestration potential.
- Collaborate with interdisciplinary teams of marine biologists, ecologists, and GeoAI experts to integrate remote sensing data with ecological and biogeochemical models.
- Provide GIS support for spatial analysis, data visualization, and creation of dynamic maps and reports for stakeholders, policy makers, and research teams.
- Prepare detailed technical reports, maps, and presentations illustrating the distribution, coverage, and carbon storage capacity of coastal blue carbon ecosystems.
- Assist in the development of web-based GIS tools and platforms for real-time monitoring of ecosystem services and carbon dynamics.

Qualifications and Skills:

- Bachelor's or Master's degree in GIS, Remote Sensing, Environmental Science, Geography, or a related field.
- Proficiency in GIS software (e.g., ArcGIS, QGIS) and remote sensing tools (e.g., ENVI, Google Earth Engine).
- Strong experience with satellite imagery (e.g., Sentinel, Landsat) and drone-based photogrammetry for environmental mapping and analysis.
- Expertise in spatial modeling, geostatistics, and handling large geospatial datasets.
- Familiarity with coastal ecosystems, particularly mangroves, seagrasses, and carbon cycle processes, is highly desirable.
- Excellent communication and report writing skills, with an ability to present complex spatial data to both scientific and non-scientific audiences.
- Knowledge of programming languages such as Python, R, or MATLAB for spatial data analysis is an advantage.